Leitner J. Hoppe P.  
**POSTER LOCATION #469**

*Evidence for Explosive H-Burning from Mg-Isotopes in Oxygen-Rich Stardust: Nova Versus Supernova Origin [#1858]*

Large 25Mg-enrichments for several presolar Group 1 silicates (presumed AGB star origin) favor nova or supernova explosions as stellar sources for these grains.

Stroud R. M. Kim T. R. Crane M. J. Pauzauskie P. J.  
**POSTER LOCATION #470**

*Noble Gas Incorporation in Presolar Nanodiamond Analogs and Related Carbonaceous Phases [#2817]*

We used a novel diamond anvil cell method to grow Ar-bearing nanodiamonds and characterized them with scanning transmission electron microscopy.

Hundley T. J. Fraundorf P.  
**POSTER LOCATION #471**

*Lab Simulation of Carbon Droplet Cooling in AGB Star Atmospheres [#2154]*

Observations confirm that cooling-rate controlled evaporating-carbon ovens can create submicron sized analogs to presolar core-rim onions from AGB atmospheres.

Haenecour P. Howe J. Y. Zega T. J. Wallace P. Amari S. et al.  
**POSTER LOCATION #472**

*Microstructure and Inclusions of In-Situ and Acid-Residue Presolar Graphite Grains [#1330]*

We report new TEM data on inclusions and surface coatings of presolar graphite identified in-situ in LAP 031117 and derived from Murchison acid residues.

Seifert L. S. Haenecour P. H. Zega T. Z. Floss C. F.  
**POSTER LOCATION #473**

*TEM Analysis of Presolar Silicate Grain in the Dominion Range 08006, CO Chondrite [#2980]*

TEM analysis of group-2 presolar Mg-silicate grain revealed an origin in low-intermediate mass AGB stars and condensed at temperatures of 1300–1350K.

Bose M. Till C. Floss C.  
**POSTER LOCATION #474**

*Chronometry Using Diffusion in Presolar Silicate Grains [#1524]*

Presolar grains embedded within clumps of dust were heated for <215k years at ~550°C in regions with high dust/gas ratios in the early solar nebula.

Lewis J. B. Bhadharla P. Floss C.  
**POSTER LOCATION #475**

*Development of a Technique to Prepare ~100 nm Presolar SiC for Atom-Probe Tomography [#1174]*

Small size of stardust / Platinum ‘x’ marks the grain / Atom-probe ready.

Bhadharla P. Lewis J. B.  
**POSTER LOCATION #476**

*An Electropolishing Cell and Procedure to Prepare Correlated TEM/APT Sample Holders for Presolar Grains [#2345]*

Thinning the half grids / Using current and acid / Electropolish.

Russell C. T. Lai H. R. Schneck U. C.  
**POSTER LOCATION #477**

*Collisions in Space: Nano-Scale Dust Production and Its Detection in Space [#1135]*

Nano-scale dust producing collisions are frequent in the inner solar system, but the solar wind clears the nano-scale dust entrained in its magnetic field.